



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/576,623	05/23/2000	John G. Carman	T4088.Cont	2724

20450 7590 07/01/2003

ALAN J. HOWARTH
P.O. BOX 1909
SANDY, UT 84091-1909

EXAMINER

KUBELIK, ANNE R

ART UNIT	PAPER NUMBER
1638	20

DATE MAILED: 07/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/576,623	CARMAN, JOHN G.
	Examiner Anne R. Kubelik	Art Unit 1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 17 April 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-4,7-9,12,17,18,23 and 34-44 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-4, 7-9, 12,17,18,23 and 34-44 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 19.
- 4) Interview Summary (PTO-413) Paper No(s) _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____

1. The amendments to the claims requested in Paper No. 18, filed 17 April 2003, have been entered. Claims 1-4, 7-9, 12, 17-18, 23 and 34-44 are pending.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Applicant in the response filed 17 April 2003 again argues the restriction, which was made final in the Office action mailed 8 May 2002. Applicant urges that the ploidy level is irrelevant to the number of inventions in the application; ploidy of the hybrids depends on the ploidy of the parents. Applicant urges that the steps for selecting the parents and hybridizing them do not change depending on ploidy level; thus, it is not a different invention to obtain hybrids of different ploidy levels (response pg 24-25).

This is not found persuasive. The different originally claimed methods have different starting materials, different method steps and different end products; thus, they are independent and distinct inventions.

Applicant urges that differing ploidy level is irrelevant to whether the search is burdensome; Applicant urges that because the majority of references application to the application are scientific papers, which are not classified in the patent classification system, the Examiner would have to search in the same location for literature relating to apomictic hybrids of other ploidy levels (response pg 25-26).

This is not found persuasive. Classification is not the only grounds for restriction. Searching for inventions using parents of different ploidy levels requires different field of search, that it requires the use of different key words. Furthermore, the subject matter is divergent; the

different originally claimed methods have different starting materials, different method steps and different end products.

Applicant urges that it would be unduly expensive and burdensome to the applicant to file divisional applications and unfair of the Office to require it when it makes no sense scientifically or policy-wise (response pg 26).

This is not found persuasive. It is unduly burdensome on the Office to search and examine more than one invention.

The restriction remains FINAL.

Priority

4. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 119(e) for the reasons stated in the Office action mailed 29 November 2002. Applicant's arguments filed 17 April 2003 have been fully considered but they are not persuasive.

Applicant urges that various pages of '211, including 22 and 56, states that asynchronous expression of genes responsible for embryo sac development, megasporogenesis, and/or embryo formation is responsible for apomixis. Applicant urges that cosmopolitan genera, which are referred to on pg 16 of '211, are distributed across widely varying latitudes and habitats, and high-latitude plants are generally long-day, while lower latitude plants have more variety in day-length requirements, citing Salisbury et al (response pg 27-29).

This is not found persuasive because none of the cited pages disclose the method step of identifying starting materials by their different flowering response. Knowledge that high-latitude

plants of are generally long-day, while lower latitude plants have more variety in day-length requirements does not provide priority for the method step.

Response to Amendment

5. The objection to claims 5-6, 8 and 18 because of informalities is WITHDRAWN in light of amendments to the claims.
6. The rejection of claims 1-9, 11-12, 16-18, 23 and 34-37 under 35 U.S.C. 112, first paragraph, as containing subject matter that was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention is WITHDRAWN in light of amendments to the claims.

Claim Objections

7. Claim 23 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Parent claim 18 already recites that the producing of progeny is by sexual reproduction (see part (e)).

Claim Rejections - 35 USC § 112

8. Claims 1-4, 7-9, 12, 17-18, 23 and 34-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that Applicant regards as the invention. Dependent claims are included in all rejections.

rejection is repeated for the reasons of record as set forth in the Office action mailed 29 November 2002, as applied to claims 1-9, 11-12, 16-18, 23 and 34-37. Applicant's arguments filed 17 April 2003 have been fully considered but they are not persuasive.

Claim 4 remains indefinite in its recitation of "the differences in flowering responses breeding".

Applicant urges that a person skill in the art would recognize that differences can be obtained by selection of pre-existing germplasm of by breeding; thus, the claim is not indefinite (response pg 36).

This is not found persuasive. The rejection is not that one could not recognize that differences can be obtained by plant breeding; the rejection is that the method steps for the breeding that produces those differences are not recited in the claimed method. The claim does not set forth any steps involved in the method/process; thus, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it does not recite active, positive steps. For example, what is the starting material for this method? What are its method steps?

Claim 7 remains indefinite in its recitation of "timing and a breeding step".

Applicant urges that a person skill in the art would recognize that desired traits can be obtained by selection of pre-existing germplasm of by breeding; thus, the claim is not indefinite (response pg 36).

This is not found persuasive. The rejection is not that one could not recognize that desired traits can be obtained by plant breeding; the rejection is that the method steps for the breeding that produces those differences are not recited in the claimed method. The claim does

not set forth any steps involved in the method/process; thus, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it does not recite active, positive steps. For example, what is the starting material for this method? What are its method steps?

The following rejections are new, due to amendment:

Claim 1, part (b), and claim 17, part (e), lack antecedent basis for the limitation “the hybridizing of the sets of delineated lines”.

In claims 1, 17 and 35-37 the phraseology “one of said sets of delineated sexual lines” and “the other of said sets of delineated sexual lines” is awkward and ungrammatical. It is suggested that “of said sets” be replaced with --set--.

Claims 2-3 and 40-44 lack antecedent basis for the limitation “the two sets of diploid delineated sexual lines that express differences in flowering responses”.

Claim 4 lacks antecedent basis for the limitation “the difference in flowering responses to various photoperiods”.

Claim 18 lacks antecedent basis for the limitation “said sets of lines” parts (b) and(c).

Claim 34 lacks antecedent basis for the limitation “the sexual lines” in lines 7 and 9 and “such hybridizing of the sets of delineated lines” in part (b).

Claims 35-37, part (b), lack antecedent basis for the limitation “the hybridizing of the sets”.

Claim 38 lacks antecedent basis for the limitation “the differences in flowering responses”.

Claim 39 is indefinite in its recitation of “wherein timing a breeding steps”. This

appears to be another method step, but, the claim does not set forth the steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. What is the starting material for this method? What are its method steps?

9. Claims 1-4, 7-9, 12, 17-18, 23 and 34-44 are free of the prior art, given the failure of the prior art to teach or suggest a method of producing apomictic plants from sexual plants by hybridizing any two sets of plants lines, wherein the plants lines differ in their flowering responses to photoperiods and their start times and durations of female or seed developmental stages.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne R. Kubelik, whose telephone number is (703) 308-5059. The examiner can normally be reached Monday through Friday, 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson, can be reached at (703) 306-3218. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9307 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Customer Service at (703) 308-0198.


AMY J. NELSON, PH.D
SUPPLEMENTAL PATENT EXAMINER
TECHNOLOGY CENTER 1600